

THE DECENTRALIZED HUMID ROOMS VENTILATION

for integration in ventilation concepts according to DIN 1946 - Part 6
measured according to DIN EN 20140-10 (ehem. DIN 52210)
measured according to EN ISO 717-1; Prüfstand nach EN ISO 140-1

Tested in accordance with the principles of sound recognized by the building inspection
in consultation with the NABau UA DIN 4109 Supplement 1 00.71.02.



safety note

*For your safety, please read before starting to use your ventilation unit
the information specified carefully. You get it important
Instructions for the proper use and maintenance of your new Room fan.
Ventomaxx-International is not liable if the following instructions are not followed*

ECO COMFORT Plus

MOUNTING INSTRUCTIONS USER MANUAL

VENTOMAXX[®]

ECO COMFORT Plus

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• safety instructions



Attention!

Protect it from wetness and moisture!
Before opening, disconnect the appliance from the mains!

All persons who have to do with the installation, commissioning and maintenance of the unit must be qualified. This manual must be followed exactly! Probably missing documents we will send you on request at short notice.

First check the perfect condition of the package and the individual accessories. Pay attention to the perfect condition of the power cord and the current-carrying wire to the fan unit. It is absolutely ensure that no kinks and damage are present in it.

The device can be connected directly to the mains supply. When the mains plug design of the device must only be connected to power outlets whose voltage and frequency with the nameplate of the unit exactly

The cable entries on / in Do not strain by pulling! There must always be out sufficient cable to the device. Otherwise, the cable may be damaged, which can lead to a fatal electric shock.

When cleaning or revision of the device that needs to be taken out of operation; more dirt in and at the device should only be removed by a professional; the circuit must be interrupted to all poles.

The cleaning of the room-side cover must only be carried out with a damp cloth. The penetration of water or other liquids enter the device must be avoided. If this should should happen, immediately disconnect the power by unplugging the power cord or turn off the device fuse. Do not turn the power back on and secure it so that no unauthorized Can be carried out commissioning.

The ECO COMFORT Plus is an exhaust fan, equipped with a highly efficient sound insulation. The ECO COMFORT Plus rounds so that the device series of sound-insulated supply and exhaust air devices, with and without heat recovery off. The ECO COMFORT Plus is mainly designed for comfortable ventilation of odor and moisture contaminated living rooms. Please make sure that the air inlet is open and not covered by any objects. A liability for other use can not be accepted. To avoid moisture damage or human health impair, be absolutely sure that a sufficient ventilation is guaranteed. Depending on the room use are supportive window ventilation (eg push ventilation one the day) in addition to the planned ventilation concept required (eg in the same room as the other Ventomaxx ventilation units).

For proper operation of the decentralized ventilation system is shutoff the availability requires of existing combustion air lines.

Except changing the filter / equipment cleaning, no further maintenance is required. Please consult before any Filter change the power plug or switch off the unit without power by turning off the fuse.

If the unit does not function properly, you should contact a qualified technician for.

• mounting instructions

General installation requirements

ECO COMFORT Plus Ventilation devices can be in all standard constructions easy to fit and close when installed inside and outside nearly flush.

The system has a modular design, allowing the use of equipment already been in the construction phase in the desired mounting design (eg LAW, straight through the wall; LAL, concealed within the soffit) can be prepared.

The ECO COMFORT Plus can to a trouble-free AC power with 85-260V, 50/60 Hz are securely connected (default). The device is also available with a 1.5 meters or 3 meters cable for connecting the Power outlet (S1.5 / S3.0).

Please note:

For insertion of the fan within the wall apertures to the outside are on-site manufacture in accordance with the following description. The required wall opening is to be provided with diameter of 200 mm. These installation instructions describe the installation of the fan part in a monolithic exterior wall. Please determine which wall structure is present and only use specified by the manufacturer fasteners for the wall.

Dependent on its condition the wall, different regulations / safety precautions must be observed (eg with an asbestos-containing facade, etc).

The assembly is therefore in principle be carried out by specialist companies. If you are not sure which Gewerk for the installation of the question or what tools and resources for professional installation is required, please contact us!

During the execution of all work with machinery and equipment, the instructions of the machine supplier / equipment manufacturer must be observed. All work must be performed with the recommended protective clothing (eg, mouth, eye protection, gloves, etc.)!

When choosing your installation situation, note the following:

At the drilling no supply lines must pass;

For multi-layered construction is to make sure that the pierced vapor barrier is sealed according to the manufacturer's instructions; in weather- acted upon areas is on the outside of the fan to provide a weather protection (sh. to also provide information on each mounting).

The room side arrangement of the housing must be chosen so that the accessibility to the revision of the device is always possible. The air exit on the unit must remain free in the range of about 25-30 cm long and must not be obstructed by furniture or handicapped etc..

Available Rough construction sets

RS-LAW straight through the wall

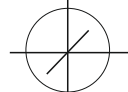
RS-LAL concealed within the soffit
in right or left version

RS-LAL db-maxxx with maximum
sound insulation

Preparing for installation

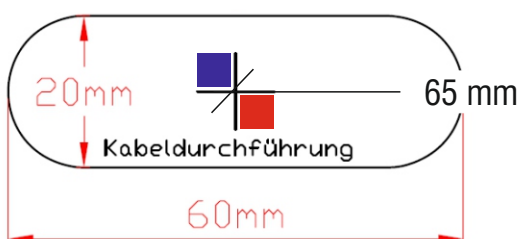
Please note that the preparation of
May differ rough opening in terms of optimal
diameter and in way of the opening preparation
(eg in exposed concrete; Wood stud partitions;
Rehabilitation walls). Please this if necessary.
Your consult for technical clarification in individual cases

Please note in this context
our installation / operating instructions and
in particular, the differences in the required
electrical cabling to the different series!



130 mm

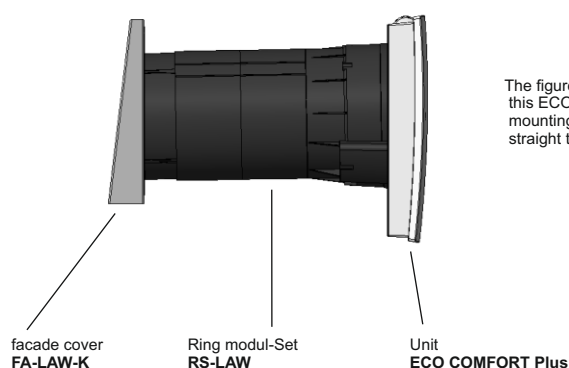
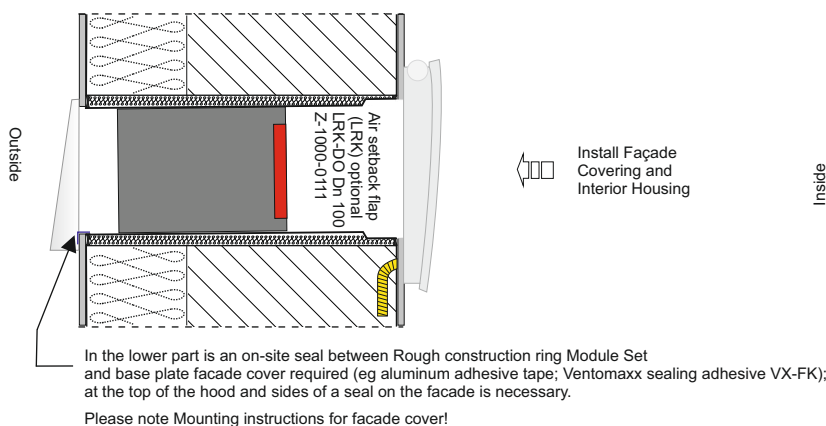
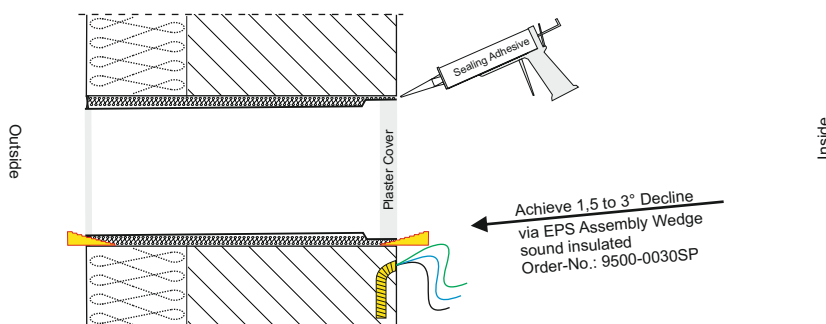
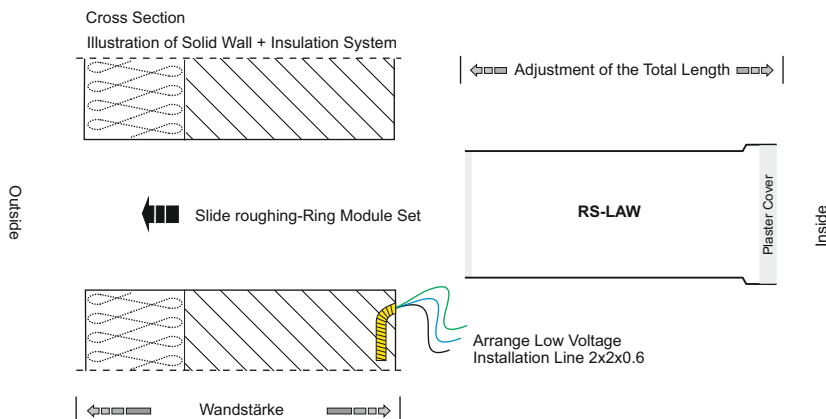
Core drilling 200 mm



Mounting of the rough-Ring Module Set

Mounting Type LAW (straight through the wall)

Comments



1. Creation of the wall opening

a) Opening 200 mm or square H / B 200 x 190 mm establish or prepare in shell

b) prepare an empty tube or place a low voltage installation line 2x2x0,6 to the central control unit!

2. Making overall length with ring modules

(wall thickness incl. insulation system and Plastering)

The ring module set is for use in Wall thicknesses from 300 mm designed;
CAUTION: reduction only on the outside!

3. Ring Module Set slide into the wall, adjusting it without tension

a) depending on the desired place for the interior cover (air outlet on top or bottom), the electric cable has to be installed like the pattern shows you (the standard air outlet is on top)

b) by adjusting the ring module sets the Wall thickness, are still present connection wall thickness the connection joints have to be sealed diffusion resistant with VX-FK

c) at LAW-assembly is a slope of Rough construction-ring module sets plan at 1,5-3° decline of your telescope unit from inside to outside

4. Insulate bigger opening or hollow spaces additionally with mineral wool professionally

5. Framed fixing in the wall with two component polyurethane foam VX-2K

a) seal room-sided opening gap between wall and channel diffusion resistant and permanently elastic (Ventomaxx Installation Sealing Adhesive VX-FK)

6. Protecting the Ventilation Unit from Dirt

a) therefore use the included protective cover during the whole construction phase (plaster cover of RS-LAW)

b) in order to avoid any kind of damage to the ventilator during the construction phase, store them in a well-protected place until the final assembly

7. Install Façade Cover after the completion of plaster and painting works

8. Install interior housing right before the completion of the construction phase

a) fix the room- sided housing right on the intended fixing points of the telescope unit

b) to avoid deformations on the housing tighten screws gently and uniformly

9. Electronic Installation must be carried out by a professional!

a) before you start working always pull the plug or switch off the flush

b) connect up to 6 ventilation devices to the central control unit using the attached connection scheme

c) initiate the devices via the central control unit following the instruction

d) after completion of the electronic installation clip the electronic protection cover and hinge the front panel

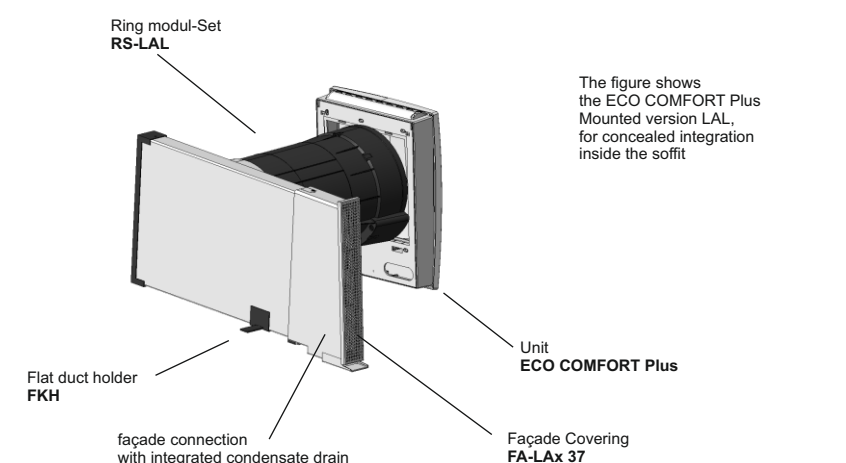
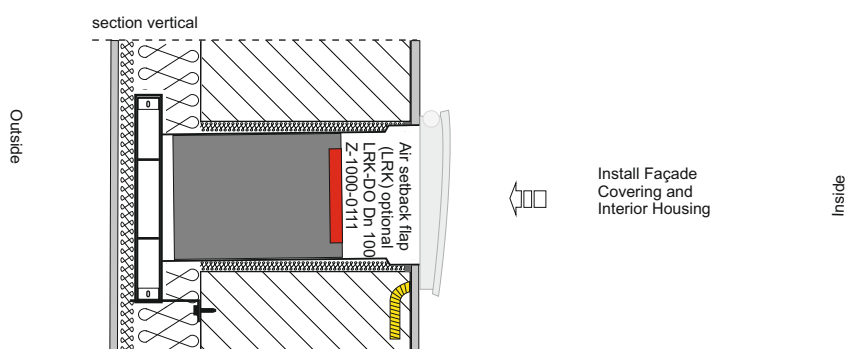
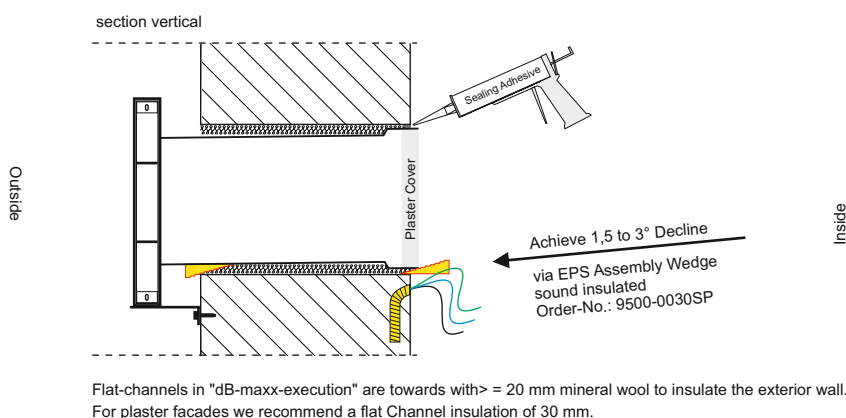
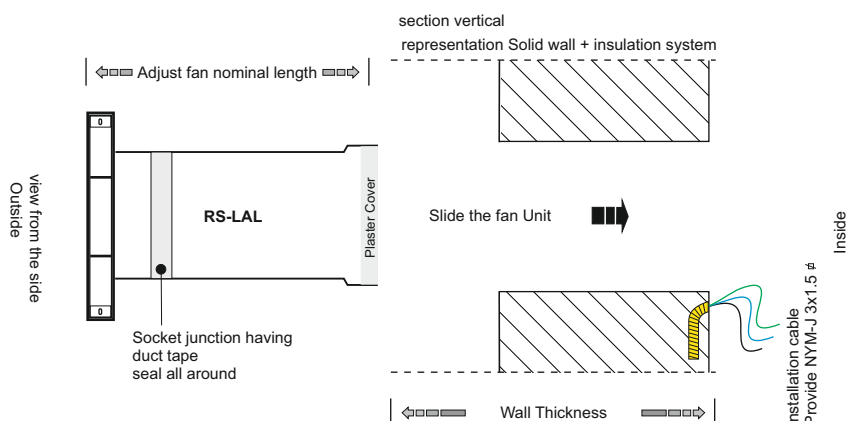
e) the device is now ready for operation in accordance with the operating instructions

f) further specialties should be cleared project based early enough; we kindly offer you support after a request

Mounting of the rough-Ring Module Set

Mounting type LAL (concealed within the soffit)

Comments



1. Creation of the wall opening

- Opening 200 mm or square H / B 200 x 190 mm establish or prepare in shell.
- prepare an empty tube or place a low voltage installation line 2x2x0,6 to the central control unit!

2. Making overall length with ring modules

- (wall thickness incl. insulation system and Plastering)
The ring module set is for use in Wall thicknesses from 330 mm designed;
CAUTION: reduction only on the outside!

3. Ring Module Set slide into the wall, adjusting it and fixing it without tension

- depending on the desired place for the interior cover (air outlet on top or bottom), the electric cable has to be installed like the pattern shows you (the standard air outlet is on top)
- by adjusting the ring module sets the Wall thickness, are still present connection wall thickness the connection joints have to be sealed diffusion resistant with VX-FK
- at LAW-assembly is a slope of Rough construction-ring module sets plan at 1,5-3° decline of your telescope unit from inside to outside, for flat channel is 5° (degrees)
- Flat duct flush on the outside Soffit level adjust; Shorten if necessary; by matching Fix flat duct holder on the outside wall

4. Insulate bigger opening or hollow spaces additionally with mineral wool professionally

5. Framed fixing in the wall with two component polyurethane foam

- seal room-sided opening gap between wall and channel diffusion resistant and permanently elastic (Ventomaxx Installation Sealing Adhesive VX-FK)

6. Flat duct system within the covering insulation level

- the adjustable Soffit connection embeddable for later plaster level of Soffit corner adjusted / taping all around
- Interface between flat duct, insulation flat and plaster connection with illmod tape seal

7. Protecting the Ventilation Unit from Dirt

- this is the included, room-side protection cover during the construction phase to use; In addition, we recommend the use set the VX-LAL-plaster cover for the flat channel
- so that the system support unit with fan during the construction phase not be damaged, should these to final assembly of a protected area is temporarily stored.

8. Install Façade Cover after the completion of plaster and painting works

9. Install Façade Cover after the completion of plaster and painting works

- fix the room- sided housing right on the intended fixing points of the telescope unit use plaster cover RS-LAL for flat duct.
- to avoid deformations on the housing tighten screws gently and uniformly

10. electrical connection

- Before starting work, switch off the fuse / Pull out the plug! Further steps as in Mounting Type LAW; see also the following pages

Installation instructions / electrical installation

Final assembly room side

Comments

4.b

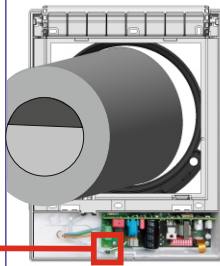


fig. similar

Fan unit push in the wall

5

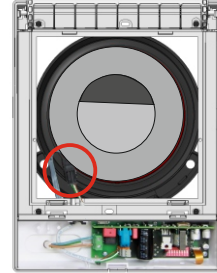


fig. similar

Low-voltage connection between Fan and circuit board

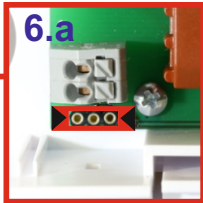
4. Slide system unit into the wall

- den von der Platine kommenden Stecker (links unten am raumseitigen Plus-Gehäuse) nach unten legen um Platz für den Einschub zu schaffen
- Als Erstes die Ventilatoreinheit in das Rohr einschieben (bis kurz vor Rohrende)
- danach ggf. zugehörige Schalldämmelemente einsetzen.

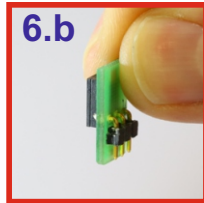
5. Lüfteranschluss

- Der Niedervolt-Lüfter (24V Gleichspannung) wird über eine Schnellsteckverbindung mit der Platine verbunden (sh. weißen Kreis)
- das von der Platine kommende Niedervolt-Rundkabel in die rechte Kabelkerbe am Gehäuse eindrücken
- das Gerät ist nun in den Werks-einstellungen betriebsbereit**

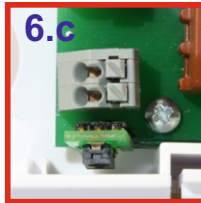
6.a



6.b



6.c



6.d



fig. similar

Setpoints for internal HYGRO make in DIP switch

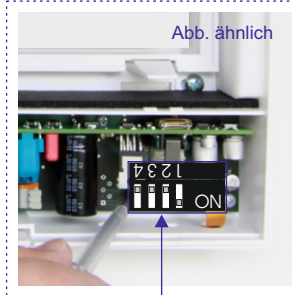


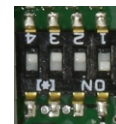
Abb. ähnlich

DIP-Switch 4-polig

6. Geräte mit internem HYGRO (Option)

Die Geräte sind nach wie vor stromlos!

- Die Steckverbindung für das HYGRO-Modul befindet sich links unten an der Platine
- Stecken Sie das Hygro-Modul auf die Platine
- Der Hygro-Sensor zeigt dabei in Richtung der Fühler-Öffnung im Plus-Gehäuse
- Stellen Sie jetzt bitte den gewünschten, Feuchte-Richtwert gemäß Tabelle links unten ein.



DIP-Schalter setzen und max. Feuchte-Sollwerte gemäß nebenstehender Übersicht festlegen.

7. HYGRO-Funktionen (Option)

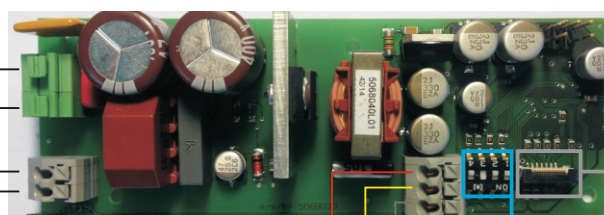
Die Wahlmöglichkeiten hierzu erfahren Sie weiter hinten unter „Programmfunktionen“



circuit boards connections

L1
N

potential-free contact



flat ribbon connection
membrane keyboard

+
PWM
-

setting
Hygro-desired values

Final assembly room side

Comments



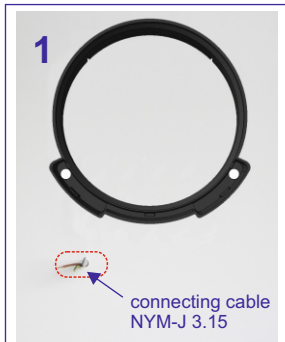
Press the unlocking device here



Set the screwdriver here

Preparation of the room sided housing

- Press the unlocking device at the housing and lift the front design cover
- Remove the inserted isolation
- Set the screw driver like shown in the illustration and snap the electronic cover with soft pressure



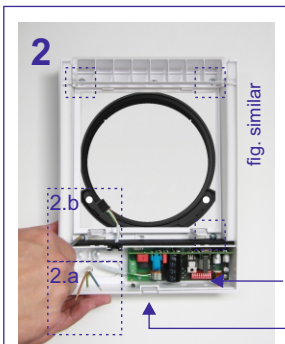
Wall telescope unit and Grid connection are prepared

1. Disconnect the power supply from current

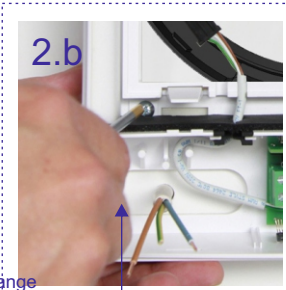
- reduce connection cable for Landline connection and wire stripping; it is only the phase and the Neutral needed
- case of mains plug version unit is not in the Plug Power outlet

2. Monting of the room- sided housing

- pull the low voltage line through the opening of the device on the backside.
- connect the housing and telescope unit by fastening the screws at the intended fixing points.



Design-Casing at the Wall / screw it to the RS



Screws 3.9 x 13-16

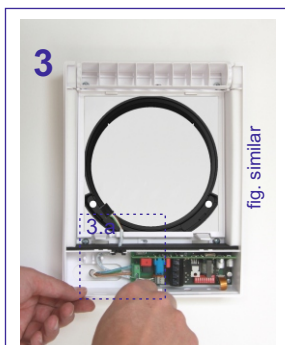
3. Electrical connection

The unit has an international Wide range input

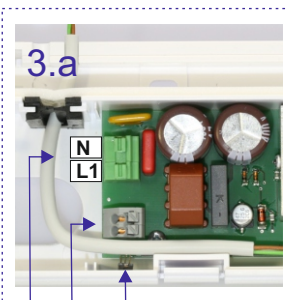
U: 90 - 260 V
f: 50 / 60 Hz

Kabelanschluss:
A: 0,75 - 1,6 mm²

- The connection of the fan is controlled by the green terminal block with N and L1
- alternatively, the unit is already be provided with plug-in connector from factory



Clamp the voltage connection



Connector internally. Hygro-Sensor

Potential free contact
In terminal block 2-pole, green

The power supply of the device via a Ring line provided with its own fuse.

Assembly instructions

VENTOsonic[®]
the sound.ahead.

Final assembly room side

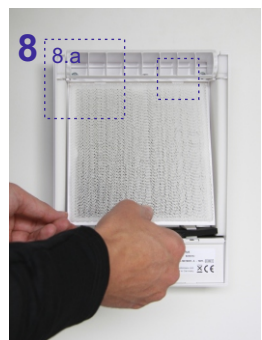
Comments



Close electric cover



- 7. Close the cover of electrical devices**
Hook the cover on the housing bottom and the separation pad press until he noticeably snaps



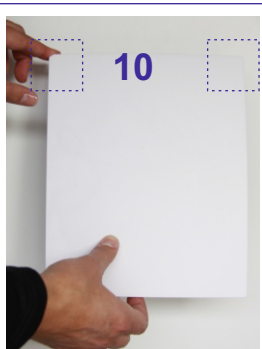
Put in the Filter

- 8 - 11 Put in the Filter**
a) Slide the filter frame at the top of the two filter connections (fig. 8a)
b) Then filter frame by pressing
Clip the latching hook successively below (fig. 9)

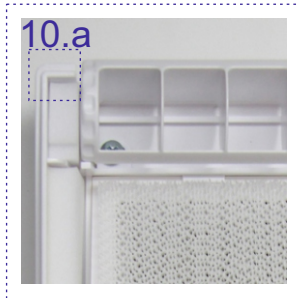
The filter change is done in reverse Order on the unlocking of the two clips and removal of the Filter frame at the central fastening.



Filter in both latching hooks
left lock / right



Hang the unit cover
and click tight



- 10. Place the room-side housing cover**
a) Hook the cover in the area of the roll and snap on the opposite side on the housing

The ventilation devices can now as to described the following page, in Operation are taken

For this purpose, units with fixed mains connection, through switch the fuse on and get electrical power

Units with power plug can now in the Power outlet be plugged

• Operating Guidelines

General Operating Instructions / Warranty

The ECO COMFORT Plus you have a high-quality energy-efficient ventilation unit decided which was designed for continuous operation. In the event that you ever want to take the warranty service, please contact with the dealer, from whom you purchased the product. Please read the instructions carefully before order to exclude that the error was not caused by incorrect adjustment or operation.

All Ventomaxx products are subject to the implied warranty of **two years**. It contains material and production defects. The warranty starts with the date on which the product was purchased respectively installed. You have to submit the evidence for the purchase or the installation. For this we ask you for a voucher a receipt where the dates can be found in. Ventomaxx reserves the right to reject the warranty if the evidence for the purchase and/or installation is not provided.

In the case of a justified warranty defect, which is due to a lack of materials or faulty manufacturing, Ventomaxx will either repair the product, Replace defective parts or replace the product.

The warranty is excluded for the following cases if:

- the assembly and operating guidelines have been ignored
- the assembly/ installation was carried out wrong
- the device was improper handled/ willfully or deliberately damaged or destroyed
- intervention(s) on the device were not carried out by expert staff
- components are affected that are exposed to normal, foreseeable stress
- No original spare parts are used

Caution

Do not remove the cover of the electrical part yourself in order to avoid a the risk of an electric shock. There are no parts behind the cover of the electrical part and the base plate that need to be maintained by the customer. Please let expert staff carry out electrical interventions.

Cleaning and Care

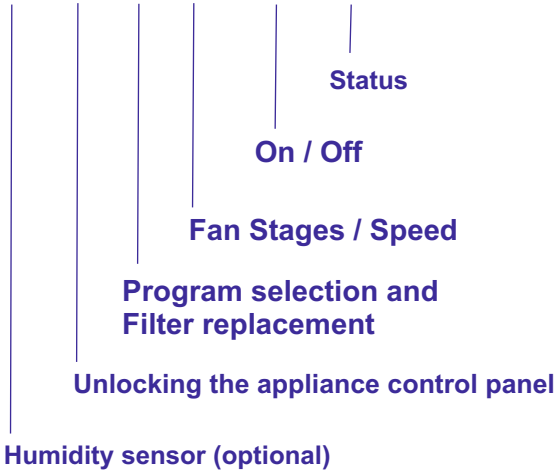
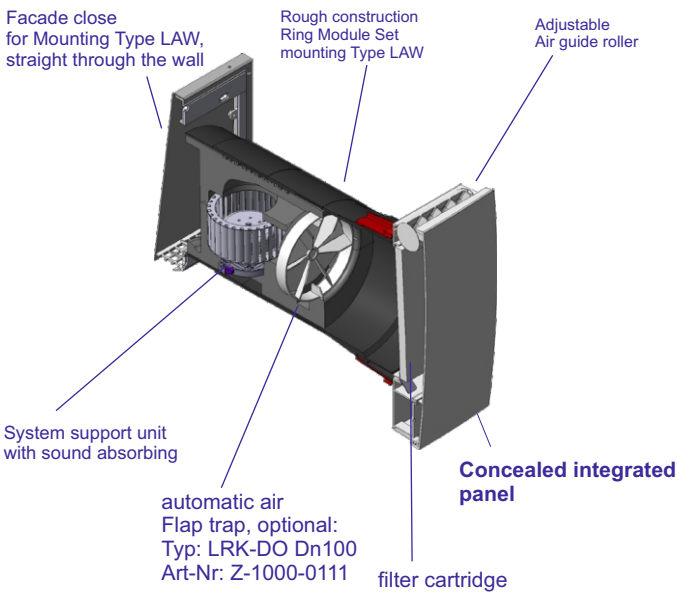
The housing towards the room side respectively the room- sided cover is easiest to clean with a humid cloth. In order to avoid damages of the surface only use water and a little detergent. Always make sure that no water can ingress.

Filter Exchange

In order to guarantee a consistent quality of fresh air, please check the condition of the filter and the components that conduct air flow regularly. Please exchange the filter at least once a year.

Unit Design / control panel

Comments



The adjacent figure shows the Unit Design for mounting type LAW, straight through the wall. Operate other types of mounting this series is done the same.

All functions in ECO COMFORT Plus can be carried out on site.

There are **three buttons** for the user operation available..

- On / Off
- Program selection
- Choice of fan speed

The LEDs indicate only the current Program state and the selected Air power stage and the due date for Filter change (see also page 14 LED display)

Initial start-up

The unit is named after the connection to the Current network (fixed or plug) immediately ready for use..

Always make sure that the device is operated with an open air guide roller!

ON / OFF

When you press the button, the station is on or off.
The unit starts to operate of preset program function in which preselected power stage on.
After restarting the device goes to the last active mode.

Fan Stages

To set the desired air flow rate There are 10 levels. the stages be by pressing the "Speed button" forwarded. The respective stage signaled by the corresponding LED. About the luminous intensity of the Speed LED two power levels are displayed.

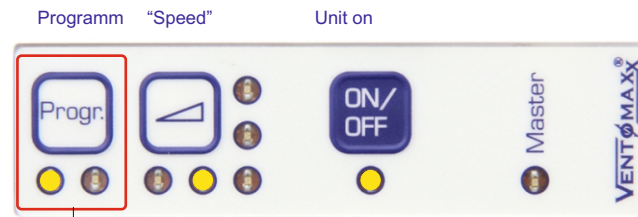
Program selection

The program selection is on the page following described.

User Manual

Program functions

Comments



Prog. 1



Prog. 2



Prog. 3



Prog. 4



Prog. 2

There are 4 programs to choose from

1. permanent ventilation

The ventilation unit operates continuously on the preset ventilation level (eg for ventilation concepts with sound-proof external air diffusers Series Air-Control)

The left Program LED will illuminate.

2. Moisture protection "static"(Option)

Demand air (with internal hygrometer Sensor, optional). Once the preset Humidity is achieved, start of exhaust air operation on the selected fan speed until the RH is 10% lower than the preset humidity setpoint.

The clamping of an external sensor (hygrometer, Thermostat, CO2 sensor, etc.) allows the Exhaust-operation on the selected by the user to the ventilation unit power level.

Both program LEDs are off.

3. Moisture protection "dynamic"(Option)

How before, however, the air starts only when the pre-set humidity level within the last 10 minutes to more than 10% RH rises above the predetermined maximum value. It runs this unit 3 levels above the selected fan speed, and on when the "set humidity" to the specified user-ventilation level back. The unit will now continue at this level until the RH to about 10% below the humidity setpoint.

Both program LEDs are on.

4. pulse ventilation

The EcoComfort Plus runs every 6 hours for 15 minutes for the selected fan speed

The rights program LEDs are on

external control

The clamping a external sensor on the potential free contact the circuit board allows needs-based external fan control at the preset power level.

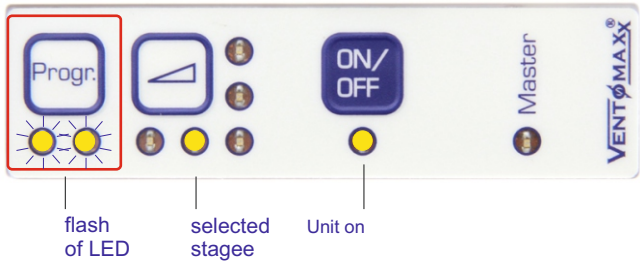
The optional internal hygro sensor is in this case automatically disabled.

Both program LEDs are off.

User Manual

Status-Message

Comments



Filter change indicator

A filter change is required after about 4000 hours of operation.
In this case, the flashing of the LEDs indicates the program impending filter changes.

Carried out reset the filter change status directly by RESET at the Unit

For this purpose press the program button until the flashing is extinguished.

Uninstall

The uninstall of the module is performed by the specialist.
On effect at the time of disposal standards and guidelines must be observed.

„Sleep-Modus“ LED-display

As soon as you no more entries on the control panel makes , the LEDs after a short time off; as soon as you the described press any key, the current selected parameter reappears (LED light up again).

When changing the mounting situations or when using optional accessories deviations are possible in the effective air power.

User Manual / Unit Maintenance

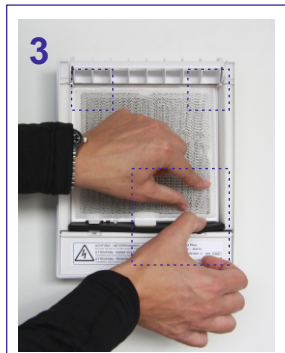
Comments



Press release of the housing cover;
Remove the front cover



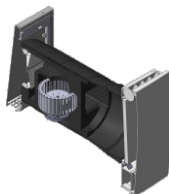
Filter on the two tabs
Unlock and remove



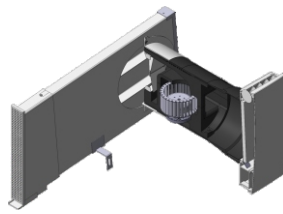
Put the filter in pickup device
Clip the behind both tabs



Hang the casing cover
and lock



Section Mounting Type LAW



Section Mounting Type LAL

When replacing the filter system supporting unit should be removed and be checked for contamination. It lends itself to it, at the same time units inside dust Suck out and wipe damp.

Only a clean air handling unit is a guarantee for a hygienic air exchange. Because the operating environment and device run times can differ from case to case, we recommend that you clean the filter and the system supporting unit in the first months of use once more as recommended below, to check for proper condition. Thus, the filter change is not overlooked, your Ventomaxx ventilation unit is equipped with a filter change indicator.

The ventilation unit otherwise no other maintenance is required by the user.

Filter replacement is performed as follows:

- Remove the front cover on the unit; to middle unlocking on the housing pressures; Cover by tightening unhook (Figure 1)
- The filter frame is two retaining clips in held device housing; by pressing the tabs the filter frame can at central web without tools be removed (Figure 2)
- New filter in the reverse Sequence in the housing Insert; Front cover Hook and up to Slightly click press down.

Please note that depending on the location of the object to change the filter approximately every 6-8 months may be required. An examination of the filter for possible contamination should be done regularly. Regardless of the degree of pollution filter for hygienic reasons, must be replaced at least once a year.

Ventomaxx replacement filter for the ECO COMFORT Plus
You can obtain under the following article number from us:

Replacement filter AIRstatic G3

Article-Number 1500-1903VX

Allergic-replacement filter F6

Article-Number 1500-1906VX

Technical Data

Eco Comfort Plus

Series / device design	Exhaust air unit soundproofed	Eco Comfort Plus
Control		internal / on the device
Air capacity 10-stage, in ³ m /h	Performance is based on 5 steps further 5 levels can be selected as an intermediate stage	~ 15 / 30 / 45 / 55 / 70
Program function	Permanent operation at the preset ventilation stage Needs-based exhaust air in combination with optional internal hygro sensor or external switch actuator (eg. Hygro / thermostat, CO2 sensor, etc.) Needs-based exhaust air in combination with optional internal hygro sensor with auto. Priority switching with rapidly rising humidity (eg after bathing or showering) every 6 hours for 15 minutes on the selected fan speed	Permanent Ventilation linke Programm-LED leuchtet Moisture protection stat. both Program-LEDs are off Moisture protection dyn. both Program-LEDs are on pulse ventilation right Program-LEDs illuminated
Fan type		EC, radial, digital
Fan power consumption	Fan Stage 1 bis 5 (Stage max. ca. 9,5 Watt)	ca. 1 - 1,8 Watt
Supply voltage (control), at 50/60 Hz		90-260 Volt - AC
Operating voltage (Unit)		230V AC / 24V DC
electricity connection		optional Fixed line / power plug
Sound pressure level / relaxation room suitable **	Fan Stage 1 bis 5 (Stage max ca. 41 dB(A))	~ 17 - 27 dB
sound insulation (from outside noise)*** depending on device type	Norm sound level difference	48 - 60 dB, Dnew
Filter quality	F5/F6 optional	G3
Cover Room side	similar RAL 9003	ABS white
Housing Dimensions HxWxD		ca. 280x218x55 mm
Facade close	conform to the system made of stainless steel or Aluminum with condensate drain	optional, Color on choice
nominal length (with optional add-on module VLE 150)	modularly expandable shortened on site	380 mm
Weight		ca. 3-4 kg
The right rough opening (about 185-200 mm) is a project basis (round or square) set so that this is always covered sufficiently by the selected units aperture during the final assembly. We will gladly provide you with the necessary dimensional drawings on request.		

**Surface sound pressure level L_{pf}

***measured according to EN 140-10 / EN ISO 140-2 / EN ISO 717; in accordance with test certificate ift-Rosenheim

... the sound ahead.

Your local contractor

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Eco Comfort Plus

VENTOMAXX®